Amendments to the Specification:

Please replace the paragraph on pages 2-3, starting at line 26, with the following amended paragraph:

Various other problems are inherent in wireless communication systems. One such problem is the so-called multipath fading problem whereby a radio frequency signal transmitted from a sender (either a base station or another mobile subscriber unit) may encounter interference enroute to an intended receiver. The signal may, for example, be reflected from objects such as buildings that are not in a direct path of transmission but then are redirected as a reflected version of the original signal to the receiver. In such instances, the receiver actually receives two versions of the same radio signal: the original version and a reflected version. Since each received signal is at the same frequency but out of phase with ~~one~~ the other due to the longer transmission path for the reflected signal, the original and reflected signals may tend to cancel each other out. This results in dropouts or fading of the received signal.

Please replace the paragraph on page 3, starting at line 14, with the following amended paragraph:

The present invention is used in a wireless data network that employs an adaptive directional antenna array to assist in isolating physical layer radio signals transmitted between system nodes. A controller can configure the antenna apparatus to maximize the affect of radiated and/or received energy. Specifically, the antenna apparatus typically includes multiple antenna elements and a like number of adjustable devices such as phase shifters, passive elements, or the like, that may be independently changed to effect the phase of received and/or transmitted signals. The antenna apparatus can therefore be oriented or steered to

various angles of arrival orientations with respect to transmitted or received signals.

Please replace the paragraph on page 4, starting at line 20, with the following amended paragraph:

As further portions of the same signal are received, such as payload portions of the data frame which follow a preamble portion, the directional antenna array can be operated to continue to scan potential new angles, continuing to look for the best signal metric in a directive mode all the time. Once a signal transmission is concluded, the last known best angle for that signal, along with an identification of the signal, ~~for use~~ is used in future reception of that same signal.

Please replace the paragraph on pages 5-6, starting at line 21, with the following amended paragraph:

When the invention is deployed in a peer-to-peer network, it may also be used in connection with a device that is responsible for relaying messages from a first node to a second node. This functionality is ~~an~~ analogous to a router function in a wireline Internet Protocol (IP) network. In such an application, during the detection process, the angle providing the best received signal metric was recorded during the receive mode for a number of nodes in the networks as described above. Therefore, whenever a message is received from a first node that needs to be relayed to a second node, if signals have already been received from that second node, then the recorded direction of its best reception is retrieved and used when the antenna array is used to transmit the signal to the second node. Storage of the best antenna angle for propagation to neighbor nodes can be handled by control functions in a manner that is analogous to other router lookup table functions, such as being contained in a lookup table entry associated with IP addresses.

Please replace the paragraph on page 9, starting at line 24, with the following amended paragraph:

The state 328 may be entered from state 326 if the unit is in a relay mode, where the best received angle may be used ~~a~~ for subsequent transmissions to that same node.

Please replace the paragraph on pages 11-12, starting at line 28, with the following amended paragraph:

It may become necessary to use the higher layer protocol information in certain circumstances wherein the physical layer protocols do not permit time to demodulate the data frame and/or do not contain identification of the sending station in the preamble portion. Such protocols present a problem in that there is no way to know when the transmitter ends without some type of demodulation taking place. However, there is, in turn, ~~no time in which to or there is~~ no time in which to demodulate the signal. For example, it may not be possible to determine quality of a reception until after an entire frame is processed. This may depend upon the specific coding used for the frame. In addition, certain protocols may use preamble portions that are too short in duration to identify the best direction in time for this antenna array to be affectively steered to the appropriate direction. For example, 802.11B Standard is potentially acceptable in this regard. However, protocols such as the 802.11A Wireless LAN Standard may not provide sufficient duration preamble. In addition, the wireless LAN protocols work on a similar radio link protocol that is similar to Ethernet. In particular, a positive acknowledgement radio link protocol is used. For example, if correctly received packets are acknowledged whereas incorrectly received packets are not. Thus, the non-acknowledgement test can be performed at a radio link protocol layer and/or higher level layers.

Please replace the paragraph on page 13, starting at line 7, with the following amended paragraph:

What is important to note here is that the higher layer protocol is being used to force a retransmission of a packet for the purpose of optimizing the antenna array setting. Other protocol attributes or units could be used for similar results. For example, a contention-free window can be set up by certain protocols using a so-called PCF or HCF mode. In the PCF mode, a means is provided for discovering the best angle that can be controlled by an access point as to which units will be transmitting during a certain period of time. Thus, the identification of the unit being known in advance, the antenna can be steered to the last known direction for the communication prior to its receipt. Thus, the control messages may be set up while in an omni-directional mode then when transmitting to the remote unit, the directed mode ~~can~~ in HCF or Hybrid Coordination Function can be determined.